ANNEX NO. 2
TO
NONREIMBURSABLE SPACE ACT AGREEMENT SAA1-30606
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LANGLEY RESEARCH CENTER
AND
BNNT, LLC
FOR
DEVELOPMENT AND OPTIMIZATION OF BORON NITRIDE NANOTUBES

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of NASA and BNNT, LLC to further develop and optimize the synthesis, production, science, and application of boron nitride nanotubes (BNNTs) and boron carbon nitride (BCNs) nanotubes. Any commercial use of BNNTs or BCNs using NASA's inventions and/or NASA's Related Entity's Inventions made under this Annex or Umbrella Agreement (per Article 10.B and/or Article 10.C of SAA1-30606) requires a license for such use and is beyond the scope of this Annex. Licensing of NASA inventions is governed by 37 C.F.R. Part 404, Licensing of Government-Owned Inventions.

ARTICLE 2. RESPONSIBILITIES

A. NASA LaRC will use reasonable efforts to:

1. Conduct modeling and simulation of the fibril BNNT formation process.
2. Conduct characterization and assay of the raw materials.
3. Conduct characterization and assay of the purified BNNT and BCN nanomaterials at various stages in the processes.
4. Provide application utility feedback based on material properties following incorporation of fibril BNNTs.
5. Collaborate with Partner on development of purification techniques and procedures.
6. Collaborate with Partner on design of experiments for NIA BNNT synthesis rig.
7. Collaborate with Partner to identify characteristics for BNNT feedstocks suitable for BNNT liquid crystals.
8. Collaborate with Partner on synthesis of borocarbonitrides ($B_xC_yN_z$) materials, other than BNNTs.

B. Partner will use reasonable efforts to:

1. Provide production processes input data required for the NASA LaRC modeling and simulation efforts.
2. Collaborate with NASA LaRC on design of experiments for NIA BNNT synthesis rig.
3. Provide consultation on techniques for incorporating fibril BNNT into materials.

4. Provide quantities of BNNTs sufficient for larger-scale test coupons.
5. Collaborate with NASA LaRC on development of purification techniques and procedures.
6. Collaborate with NASA LaRC to identify characteristics for BNNT feedstocks suitable for BNNT liquid crystals.
7. Collaborate with NASA LaRC on synthesis of $B_xC_yN_z$ materials, other than BNNTs.

ARTICLE 3. SCHEDULE AND MILESTONES

The planned major milestones for the activities for this Annex defined in the "Responsibilities" Article are as follows:

1. NASA LaRC to provide characterization and assay of the raw materials and purified BNNT and BCN nanomaterials.	On an ongoing basis throughout period of performance
2. NASA LaRC to provide modeling and simulation of the fibril BNNT synthesis process.	On an ongoing basis throughout period of performance
3. NASA LaRC and BNNT, LLC to collaborate on development of purification techniques and procedures	On an ongoing basis throughout period of performance
4. NASA LaRC to provide data relevant to BNNT application utility based on material properties.	On an ongoing basis throughout period of performance
5. NASA LaRC and BNNT, LLC to collaborate to identify characteristics for BNNT feedstocks suitable for BNNT liquid crystals.	On an ongoing basis throughout period of performance
6. BNNT, LLC to provide production processes input data required for the NASA LaRC modeling and simulation efforts.	On an ongoing basis throughout period of performance
7. NASA LaRC and BNNT, LLC to collaborate on design of experiments for NIA BNNT synthesis rig.	On an ongoing basis throughout period of performance
8. BNNT, LLC to provide consultation on techniques for incorporating fibril BNNT into materials.	On an ongoing basis throughout period of performance
9. BNNT, LLC to provide BNNTs for larger scale test coupons.	On an ongoing basis throughout period of performance

ARTICLE 4. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

A. Data produced under this Annex which is subject to paragraph C. of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement will be protected for the period of two (2) years from the date the Data is produced.

B. Under paragraph H. of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement, Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data provided.

1. Background Data: *The Disclosing Party's Background Data, if any, will be identified in a separate technical document.*

   Technology covered by NASA case number LAR 17535-1, “Boron Nitride Nanotubes”, will be used in support of the work being performed under this Annex.

2. Third Party Proprietary Data: *The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.*
3. Controlled Government Data: *The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.*
4. The following software and related Data will be provided to Partner under a separate Software Usage Agreement: *None*

ARTICLE 6. TERM OF ANNEX

This Annex becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or one (1) year from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella Agreement. The term of this Annex shall not exceed the term of the Umbrella Agreement. The Annex automatically expires upon the expiration of the Umbrella Agreement.

ARTICLE 7. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Annex by providing thirty (30) calendar days written notice to the other Party.

ARTICLE 8. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Annex.

Management Points of Contact	
NASA Langley Research Center David F. Moore Associate Director for Space Technology and Advanced Development Programs Mail Stop 104 Hampton, VA 23681 Phone 757.864.9169 Email: david.f.moore@nasa.gov	BNNT, LLC Tom Henneberg President & CEO, BNNT, LLC 300 Ed Wright Lane Suite-A Newport News, VA 23606 Phone: 757.369.1939 Email: tomhenneberg@bnnt.com
Technical Points of Contact	
NASA Langley Research Center Cheol Park Senior Materials Engineer Mail Stop 226 Langley Research Center Hampton, VA 23681 Phone: 757.864.8360 Email: cheol.park-1@nasa.gov	BNNT, LLC Michael W. Smith Chief Scientist P.O. Box 1698 Newport News, VA 23601-0698 Phone: 757.369.1939 Email: mikesmith@bnnt.com

ARTICLE 9. MODIFICATIONS

Any modification to this Annex shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Modification of an Annex does not modify the terms of the Umbrella Agreement.

ARTICLE 10. SIGNATORY AUTHORITY

The signatories to this Annex covenant and warrant that they have authority to execute this Annex. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LANGLEY RESEARCH CENTER	BNNT, LLC
BY: DAVID DRESS Digitally signed by DAVID DRESS Date: 2021.10.01 10:49:26 -04'00' David A. Dress Director, Space Technology and Exploration Directorate	BY: da3e2850-16be-4079-a771-d2581e726d10 Digitally signed by da3e2850-16be-4079-a771-d2581e726d10 Date: 2021.09.28 13:36:47 -04'00' Tom Henneberg President & CEO
DATE:	DATE: Tues 28 Sept 2021